In the Claims

1. (Previously Amended) A circuit for amplifying a signal, comprising:

a power amplifier having an input signal path and an output signal path; and

a predistortion linearizer circuit that is capable of generating a distorted signal which is reflected onto the input signal path of the power amplifier and inputted into said power amplifier, wherein said predistortion linearizer is located a predetermined distance from the input signal path and not physically coupled to the input signal path, and said distorted signal compensates for at least some of the nonlinear spurs introduced by said power amplifier to an input signal applied to the input signal path and inputted into said power amplifier such that said power amplifier generates a compensated output signal.

2. (Previously Amended) The circuit of Claim 1, wherein said predistortion linearizer includes:

a diode;

a coupling circuit, coupled to said diode, capable of introducing a relatively small amount of power from the input signal into said diode and further capable of reflecting the distorted signal generated by said diode back onto the input signal path without being physically coupled to the input signal path; and

a direct current adjustment circuit, coupled to said diode, capable of adjusting the amount of direct current inputted into said diode.

3 (Currently Amended). The circuit of Claim 2, wherein said coupling circuit includes a microstrip having a predefined shape and located a predetermined distance from the signal path leading into said power amplifier, and wherein the relatively small amount of power from the input signal is related to the predefined shape of the microstrip and the predetermined distance from the signal path.

4. (Previously Amended) The circuit of Claim 2, wherein said diode is a Schottky diode.

5 (Currently Amended). The circuit of Claim 3 ~~2~~, wherein the predefined shape of the microstrip, the predetermined distance from the signal path of the microstrip ~~said coupling circuit~~ and said direct current adjustment circuit are manually adjusted to optimize a shape of the distorted signal.

6. (Previously Amended) The circuit of Claim 2, wherein said coupling circuit and said direct current adjustment circuit are automatically adjusted to optimize a shape of the distorted signal.

7. (Previously Amended) The circuit of Claim 1, wherein said predistortion linearizer does not affect the signal path or the operation of said power amplifier.

8. (Previously Amended) The circuit of Claim 1, wherein said ciruit is in a transmitter incorporated within a point-to-point communication system.

9. (Previously Amended) The circuit of Claim 1, wherein said circuit is in a transmitter implemented in a wireless system operating at or above 2 GHz.

10. (Previously Amended) A predistortion linearizer for use with a nonlinear device, said predistortion linearizer comprising a diode capable of generating a distorted signal which is reflected onto a signal path and inputted into the nonlinear device, wherein said predistortion linearizer is not physically coupled to the signal path and said distorted signal compensates for at least some of the nonlinear spurs introduced by the nonlinear device to an input signal applied to the signal path and inputted into said nonlinear device such that said nonlinear device outputs a compensated output signal.

11. (Previously Amended) The predistortion linearizer of Claim 10, wherein said predistortion linearizer includes:

said diode;

a coupling circuit, coupled to said diode, capable of introducing a relatively small amount of power from the input signal into said diode and further capable of reflecting the distorted signal generated by said diode back onto the signal path and into said nonlinear device without being physically coupled to the signal path; and

a direct current adjustment circuit, coupled to said diode, capable of adjusting the amount of direct current inputted into said diode.

12. (Original) The predistortion linearizer of Claim 11, wherein said coupling circuit includes a microstrip having a predefined shape and located a predetermined distance from the signal path leading into said nonlinear device.

13. (Original) The predistortion linearizer of Claim 11, wherein said coupling circuit and said direct current adjustment circuit are manually adjusted to optimize a shape of the distorted signal.

14. (Original) The predistortion linearizer of Claim 11, wherein said coupling circuit and said direct current adjustment circuit are automatically adjusted to optimize a shape of the distorted signal.

15. (Original) The predistortion linearizer of Claim 10, wherein said diode is a Schottky diode.

16. (Original) The predistortion linearizer of Claim 10, wherein the type of diode used depends on the frequency of the input signal.

17. (Original) The predistortion linearizer of Claim 10, wherein said predistortion linearizer does not affect the signal path or the operation of said nonlinear device.

18. (Original) The predistortion linearizer of Claim 10, wherein said predistortion linearizer is incorporated within a transmitter operating at or above 2 GHz.

19. (Original) The predistortion linearizer of Claim 10, wherein said nonlinear device is a power amplifier or a mixer.

20. (Previously Amended) A method for linearizing a nonlinear device, said method comprising the steps of:

receiving, at the nonlinear device, an input signal on a signal path;

generating a distorted signal which is reflected onto the signal path by a coupling circuit and inputted into the nonlinear device, wherein the coupling circuit is not physically connected to the signal path; and

outputting, from the nonlinear device, a compensated signal, wherein said distorted signal compensates for at least some of the nonlinear spurs introduced to the input signal by the nonlinear device.

21. (Previously Amended) The method of Claim 20, wherein said step of generating a distorted signal includes:

introducing, using a coupling circuit, a relatively small amount of power into the diode from the input signal;

generating, using a diode, the distorted signal; and

reflecting, using the coupling circuit, the distorted signal back onto the signal path and into the nonlinear device, wherein said coupling circuit is located a predetermined distance from the nonlinear device.

22. (Original) The method of Claim 21, wherein said diode can generate the distorted signal that includes predetermined nonlinear spurs having phases and amplitudes which are in part a function of the amount of direct current inputted into said diode by a direct current adjustment circuit.

23. (Original) The method of Claim 22, wherein said coupling circuit includes a microstrip having a predefined shape and located a predetermined distance from the signal path leading into said nonlinear device.

24. (Original) The method of Claim 22, wherein said coupling circuit and said direct current adjustment circuit were manually adjusted to optimize a shape of the distorted signal.

25. (Original) The method of Claim 22, wherein said coupling circuit and said direct current adjustment circuit were automatically adjusted to optimize a shape of the distorted signal.

26. (Original) The method of Claim 20, wherein said diode is a Schottky diode.

27. (Original) The method of Claim 20, wherein the type of diode used depends on the frequency of the input signal.

28. (Original) The method of Claim 20, wherein said diode does not affect the signal path or the operation of the nonlinear device.

29. (Original) The method of Claim 20, wherein said nonlinear device and said diode are incorporated within a transmitter operating at or above 2 GHz.

30. (Original) The method of Claim 20, wherein said nonlinear device is a power amplifier or a mixer.

31. (Previously Amended) A predistortion linearizer for use with a nonlinear device, said predistortion linearizer comprising:

a coupling circuit capable of receiving a relatively small amount of power from an input signal on a signal path that is connected to the nonlinear device, wherein said coupling circuit is not physically connected to the signal path;

a diode, coupled to said coupling circuit, capable of receiving the relatively small amount of power from the input signal;

a direct current adjustment circuit, coupled to said diode, capable of adjusting the amount of direct current inputted into said diode which is capable of generating a distorted signal; and

said coupling circuit further capable of reflecting the distorted signal generated by said diode back onto the signal path and into said nonlinear device, wherein said distorted signal compensates for at least some of the nonlinear spurs introduced by the nonlinear device to the input signal applied to the signal path and inputted into said nonlinear device such that said nonlinear device outputs a compensated output signal.

32. (Original) The predistortion linearizer of Claim 31, wherein said coupling circuit includes a microstrip having a predefined shape and located the predetermined distance from the signal path connected to said nonlinear device.

33. (Original) The predistortion linearizer of Claim 31, wherein the predetermined distance the coupling circuit is located from the nonlinear device can be tuned to compensate for the nonlinear spurs using metalized ceramic tabs or variable capacitors.

34. (Original) The predistortion linearizer of Claim 31, wherein said predistortion linearizer is placed in front of the nonlinear device.